

## UNIVERSITAS GADJAH MADA

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 Undergraduate Programme in Mathematics

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**MODULE HANDBOOK** 

Module name	Programming II Laboratory
Module level, if applicable	Bachelor
Code, if applicable	MII-1212
Subtitle, if applicable	-
Courses, if applicable	Programming II Laboratory
Semester(s) in which the	1 <sup>st</sup> (first)
module is taught	
Person responsible for the	Guntur Budi Herwanto, M.Cs.
module	
Lecturers	Guntur Budi Herwanto, M.Cs.
Language	Bahasa Indonesia
Relation to curriculum	Elective course in the first year (2 <sup>nd</sup> semester) Bachelor Degree
Type of teaching, contact hours	Undergraduate degree program: lectures, < 30 students
Workload	1. Lectures: 1 x 100 = 100 minutes (1.5 hours) per week. 2. Exercises and
	Assignments: $2 \ge 60 = 120$ minutes (2 hours) per week. 3. Private study: $2 \ge 60 = 120$
	minutes (2 hours) per week.
Credit points	1
Requirements according to	A student must have attended at least 75% of the lectures to sit in the exams.
the examination regulations	
Recommended prerequisites	Programming II
Module objectives/intended	Midterms examination and Final examination.
learning outcomes	CO 1. having knowledge about the theory and implementation of the basic concepts
	of algorithms and data structures;
	CO 2. can implement the basic theories and concepts of Object Oriented
	Programming (OOP);
	CO 3. can build a computer program based on OOP;
	CO 4. can implement linear data structures such as linked lists, stacks and queues;
	CO 5. can implement advanced sorting algorithms in computer programs;
	can implement non-linear data structures such as matrices, multiple linked list and tree
	as well as a graph.
Content	Programming Lab I is a compulsory course given to students of the first semester at
	Department of Computer Science FMIPA UGM. This course provides the knowledge
	students so that they are able to recognize the definition of programming, translating
	an algorithm mapping basic concept into algorithmic language, and able to solve its
Study and avamination	Einel examination
requirements and forms of	
examination	
Media employed	ICD whiteboard websites handouts
Reading List	
Reading List	